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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/743,840	01/17/2001	Barbara A. Zilinskas	13216-73220	8791

7590

09/24/2003

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EXAMINER

HELMER, GEORGIA L

ART UNIT

PAPER NUMBER

1638

DATE MAILED: 09/24/2003

16

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

09/743,840

Applicant(s)

ZILINSKAS ET AL.

Examiner

Georgia L. Helmer

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Status of the Claims

1. The Office acknowledges receipt of Applicants Response; dated 16 June 2003, paper number 15.
2. Applicant has cancelled claims 18-21, and amended claims 1, 7, and 9. Claims 1-10 are pending, and are examined in the instant action.
3. This action is made FINAL necessitated by Applicant's amendment.
4. All rejections not addressed below have been withdrawn.
5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112, first paragraph

Enablement

6. Claims 1-10 remain rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.
7. Quoting the Office Action, pages 5-7
 - *The amount of guidance given, and the presence of working examples.* The physiological art in general is acknowledged to be unpredictable (MPEP 2164.03). Applicant provides three examples: Example 2, of Agrobacterium mediated transformation of Creeping Bentgrass with superbinary plasmid pSB111SH. Example 3, of Agrobacterium mediated transformation of Tall Fescue with superbinary plasmid pSB111SH. Example 4, Agrobacterium

Art Unit: 1638

mediated transformation of Velvet Bentgrass with superbinary plasmid pSB111SH. Applicant gives detailed information about bacterial and plant media which could be used, and goes through a series of steps, beginning with production of callus from seed, and followed by steps which could result in the production of transgenic turfgrass tissue or plants. However, Applicant gives no guidance about which protocols, which media and which steps, if any, result in the production of transgenic turfgrass plants. While working examples are not required, guidance as to what protocols, what conditions, what starting materials, and which combinations of these are required, with a reasonable expectation of success. Lacking such guidance, one skilled in the art would need to do random trial and error experimentation, which would require undue experimentation to make and/or use the claimed invention.

Applicant traverses, stating primarily that the specification provides sufficient guidance to practice the claimed invention. (Response, p 12). Applicant then cites various places in the specification where details are given. Applicant's traversal has been considered and is not persuasive because the limitations of the specification, unless stated in the claims, are not read into the claims.

8. Claim 3, drawn to genes from a plasmid of *Agrobacterium tumefaciens* stain 281, and claim 4, drawn to a plasmid pSB111SH, remain rejected for reasons of record. Applicant describes various parts of the plasmid pSB111SH, but no sequence information is given, so that one skilled in the art would not be able to reproduce this plasmid. A plasmid of *Agrobacterium tumefaciens* stain 281, the virulence genes thereof, has no further information given, and one skilled in the art would not be able to reproduce this plasmid

Applicant traverses, stating primarily (Response p. 15-16) that a skilled practitioner, following the directions provided would be routine and without undue experimentation construct the plasmid for further use.

Applicant's traversal has been considered and is unpersuasive for reasons of record.

The plasmid pSB111SH, lacking the sequence data of the complete plasmid, is not enabled by the specification.

Claim Rejections - 35 USC § 102

9. Claim 1 remains rejected under 35 U.S.C. 102(b) as being anticipated by Stalker, US 4,810,648, issued March 7, 1989, for reasons of record.

Quoting the Office Action of 31 January 2003:

Stalker teaches the production of transgenic turfgrass (col 6, lines 65-69) by providing regenerable callus tissue (col 6, line 69), inoculating the tissue with Agrobacterium (col 21, lines 43-45) having a heterologous DNA construct linked to a promoter from a monocot species (col 6, lines 38-42) and a antibiotic resistance selectable marker (col 19, lines 55-58), culturing under conditions to enable the Agrobacterium to transform cells of the tissue (col 21, line 36-55), selectively culturing on antibiotic (col 22, lines 63-65), and producing transgenic turfgrass (col 6, lines 63 – col 7, line 2).

Applicant traverses, stating primarily (response, p. 16) that claim 1 recites the step of "inoculating the tissue with Agrobacterium carrying at least one vector for transformation, the vector comprising virulence genes", yet the Office Action fails to identify any suggestion that Stalker teaches the use of virulence genes.

Applicant's traversal has been considered and is unpersuasive because Stalker recites (column 22, lines 61-64)"the plasmids being transformed into A. tumefaciens stain

LBA4404, followed by cocultivation with tobacco..." A. tumefaciens stain LBA4404, contains the virulence plasmid pAL4404, which carries the Agrobacterium virulence genes. Cocultivation of the Agrobacteria with the plant activates the virulence genes. Therefore the protocol of Stalker inherently uses the Agrobacterium virulence genes.

Remarks

10. No claim is allowed.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Georgia L. Helmer whose telephone number is 703-308-7023. The examiner can normally be reached on 8:30 - 5:00.

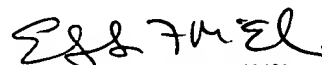
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on 703-306-3218. The fax phone numbers for

Art Unit: 1638

the organization where this application or proceeding is assigned are 703-308-4242 for regular communications and 703-308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Georgia Helmer PhD
Patent Examiner
Art Group 1638
September 22, 2003


ELIZABETH F. McELWAIN
PRIMARY EXAMINER
GROUP 1800